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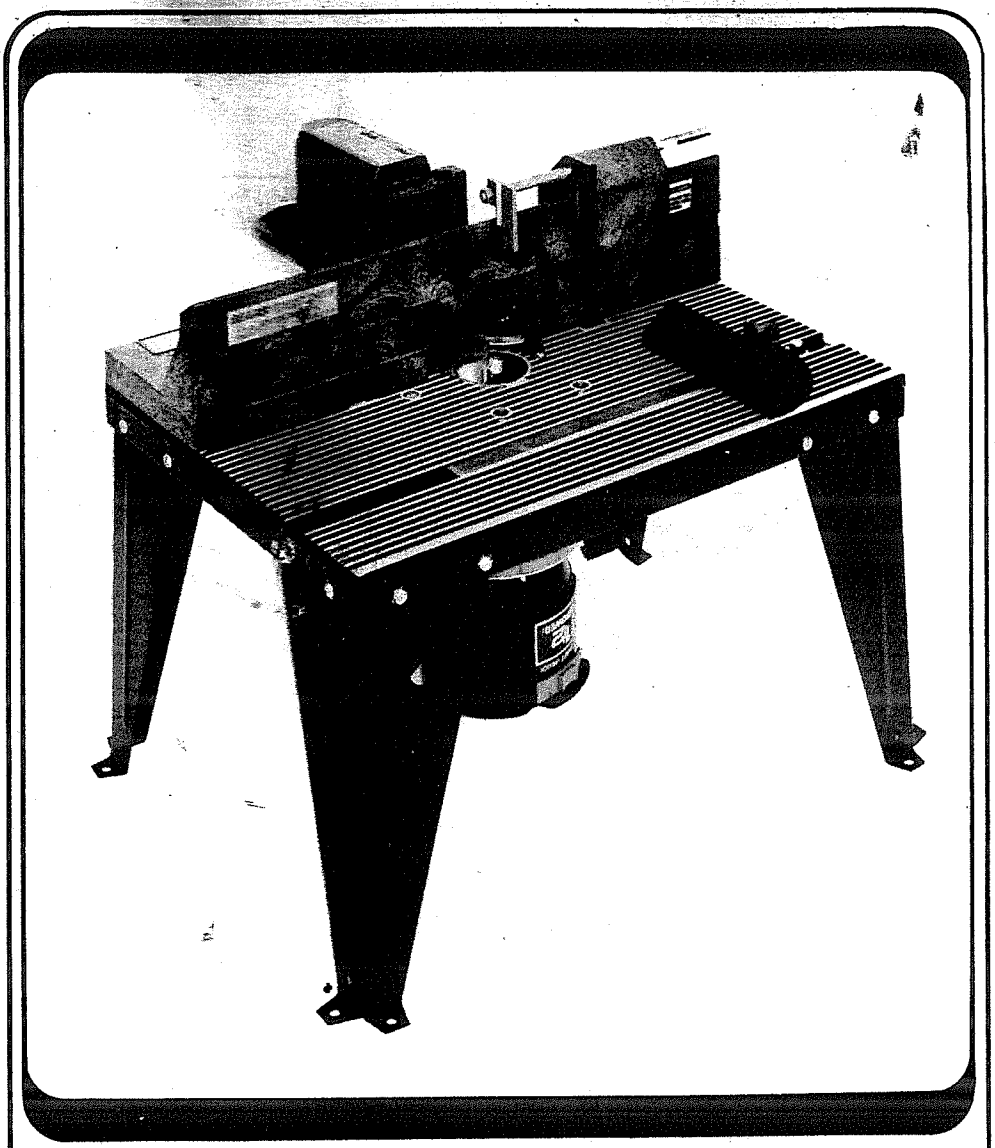
SEARS

owners manual

MODEL NO.

171.254790



CRAFTSMAN

ROUTER TABLE

FULL FUNCTION/UNITIZED FENCE

- assembly
- operating

CAUTION:
READ ALL INSTRUCTIONS CAREFULLY

Sold by SEARS, ROEBUCK AND CO., Chicago, IL 60684 U.S.A.

61071

MADE IN U.S.A.

Printed in U.S.A. 4-92

WARNING: FAILURE TO HEED ALL SAFETY AND OPERATING INSTRUCTIONS AND WARNINGS REGARDING USE OF THIS PRODUCT CAN RESULT IN SERIOUS BODILY INJURY.

GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS

1. **KNOW YOUR POWER TOOL**
   Read the owner's manual carefully. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

2. **GROUND ALL TOOLS (UNLESS DOUBLE INSULATED)**
   If tool is equipped with an approved 3-conductor cord and a 3-prong grounding type plug, it should be plugged into a three hole electrical receptacle. If adapter is used to accommodate a two-prong receptacle, the adapter wire must be attached to known ground, (usually the screw securing receptacle cover plate). Never remove third prong. Never connect green ground wire to a terminal.

3. **KEEP GUARDS IN PLACE**
   in working order, and in proper adjustment and alignment.

4. **REMOVE ADJUSTING KEYS AND WRENCHES**
   Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

5. **KEEP WORK AREA CLEAN**
   Cluttered areas and benches invite accidents. Floor must not be slippery due to wax or sawdust.

6. **AVOID DANGEROUS ENVIRONMENT**
   Don't use power tools in damp or wet locations or expose them to rain. Keep work area well lighted. Provide adequate surrounding work space.

7. **KEEP CHILDREN AWAY**
   All visitors should be kept a safe distance from work area.

8. **MAKE WORKSHOP KID-PROOF**
   —with padlocks, master switches, or by removing starter keys.

9. **DON'T FORCE TOOL**
   It will do the job better and safer at the rate for which it was designed.

10. **USE RIGHT TOOL**
    Don't force tool or attachment to do a job it was not designed for.

11. **WEAR RIGHT APPAREL**
    Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches) to get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.

12. **USE SAFETY GOGGLES (Head Protection)**
    Wear Safety goggles (must comply with ANS Z87.1) at all times. Also, use face or dust mask if cutting operation is dusty, and ear protectors (plugs or muffs) during extended periods of operation.

13. **SECURE WORK**
    Use clamps or a vise to hold work when practical. It's safer than using your hand, frees both hands to operate tool.

14. **DON'T OVERREACH**
    Keep proper footing and balance at all times.

15. **MAINTAIN TOOLS WITH CARE**
    Keeps tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

16. **DISCONNECT TOOLS**
    before servicing; when changing accessories such as blades, bits, cutters, etc.

17. **AVOID ACCIDENTAL STARTING**
    Make sure switch is in "OFF" position before plugging in.

18. **USE RECOMMENDED ACCESSORIES**
    Consult the owner's manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.

19. **NEVER STAND ON TOOL**
    Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.

    Do not store materials above or near the tool such that it is necessary to stand on the tool to reach them.

20. **CHECK DAMAGED PARTS**
    Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

21. **DIRECTION OF FEED**
    Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

22. **NEVER LEAVE TOOL RUNNING UNATTENDED**
    Turn power off. Don't leave tool until it comes to a complete stop.

GENERAL SAFETY INSTRUCTIONS FOR THE ROUTER TABLE WITH UNITIZED FENCE.

1. **ALWAYS USE EYE PROTECTION**
   The operation of any power tool can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety goggles before commencing power tool operation. Safety goggles are available at Sears retail or catalog stores.

2. **KEEP HANDS CLEAR OF BITS, AND WORKING AREA**

3. **MAKE AND USE A PUSH STICK TO MOVE SMALL WORKPIECES ACROSS THE CUTTING AREA.**

4. **KEEP ROUTER CLEAN**
   AFTER EVERY USE, CLEAN SAW DUST OFF THE ROUTER. (ALSO BLOW OUT INSIDE).

5. **YOUR ROUTER TABLE IS PROVIDED WITH A DUST COLLECTING ATTACHMENT. ALWAYS USE SHOP VAC. FOR ALL ROUTING OPERATIONS REQUIRING USE OF FRONT SIDE OF UNITIZED FENCE. (FRONT SIDE IS THE SIDE WITH THE CRAFTSMAN LABEL).**

   NOTE: Motors used on wood-working tools are particularly susceptible to the accumulation of sawdust and wood chips, and should be blown out, or "vacuumed", frequently to prevent interference with normal motor ventilation.

6. **CHECK FUNCTION OF GUARD BEFORE EACH USE. REMOVE ALL DUST AND CHIPS FROM GUARD AREA AS NEEDED TO MAINTAIN GUARD FUNCTION.**

7. **NEVER PUT YOUR FINGERS UNDER THE GUARD WHEN THE ROUTER IS PLUGGED IN.**

8. **ALWAYS USE THE ROUTER TABLE FENCE TO GUIDE THE WORK. DO NOT WORK FREE HAND.**
   When using pilot type bits, keep the fences as close to the pilot as possible to provide additional backup and additional guidance and to avoid chances of an accident and possible personal injury.

9. **ALWAYS FEED AGAINST THE ROTATION OF THE CUTTER WHEN ROUTING ON THE ROUTER TABLE. FEED WORKPIECES IN THE DIRECTION OF THE ARROW AS SHOWN ON THE LABEL ON THE SIDE OF THE FENCE BEING USED (WHEN FACING THE TABLE FRONT).**

10. **FOR ALL EDGE CUTTING AND END CUTTING OPERATIONS, USE FRONT SIDE OF UNITIZED FENCE. USE BACK SIDE OF FENCE ONLY FOR ROUTING OPERATIONS AWAY FROM EDGE ON THE UNDERSIDE OF WORKPIECE SUCH AS GROOVING; FLUTING; VEINING; CROWN MOLDING. ETC.**

11. **WHEN END CUTTING ON WORKPIECES 4" WIDE OR LESS, CLAMP AND HOLD AND FEED THE WORKPIECE WITH THE PUSH BLOCK USING BOTH HANDS AS SHOWN IN FIG. #27. KEEP FINGERS CLEAR OF BIT WHEN MOVING WORKPIECE ACROSS THE CUTTING AREA. NEVER PLACE YOUR HANDS LOWER THAN THE TOP OF RETRACTABLE GUARD.**

12. **ROUTER BITS ARE EXTREMELY SHARP.**
    Be extra careful when working around them.

13. **SOME ROUTERS WHEN USED IN AN UPSIDE DOWN POSITION (SUCH AS ON A ROUTER TABLE) WILL FALL (OR DROP) OUT OF THE ROUTER BASE WHEN THE BASE CLAMP IS LOOSENED. IT IS THEREFORE ABSOLUTELY NECESSARY TO SUPPORT THE ROUTER MOTOR FROM BELOW WHEN THE BASE CLAMP IS LOOSENED TO MAKE ADJUSTMENTS, OR FOR ANY OTHER REASON.**

14. **ALWAYS LOOK UNDER THE TABLE AT THE SWITCH WHEN TURNING THE ROUTER ON/OFF AND TOUCH NOTHING BUT THE SWITCH. NEVER REACH UNDER THE TABLE WHEN ROUTER IS RUNNING FOR ANY OTHER REASON.**

    NOTE: It is far more safe and convenient to use a "Sears Craftsman 9_25182 Router Table Switch Package". This switch provides a key operated ON/OFF button which allows very fast and easy access when and if it becomes necessary to turn the router "OFF" quickly. The key can be removed to render the switch inoperable to unauthorized people.

15. **ONCE BOTH GUARDS ARE INSTALLED FOR ROUTING, DO NOT REMOVE THEM FOR ANY REASON.**

16. **MOUNT ROUTER TABLE FIRMLY AND SECURELY TO A WORK SURFACE BEFORE USE. FAILURE TO DO SO COULD CAUSE TABLE TO TIP OVER OR SLIDE DURING OPERATION RESULTING IN PROPERTY DAMAGE AND/OR SERIOUS BODILY INJURY.**

17. **WARNING:**
    BEFORE MAKING ANY CUT, UNPLUG ROUTER AND RETRACT GUARD TO MAKE ABSOLUTELY SURE THAT RETRACTABLE GUARD CLEARS THE ROUTER BIT, AND THE GUARD IS FUNCTIONING NORMALLY. SEE FIG. #19.

18. **WARNING:**
    ROUTER VIBRATIONS SOMETIMES CAN CAUSE FASTENERS FOR THE TABLE, THE ROUTER AND THE UNITIZED FENCE TO GET LOOSE! PERIODICALLY CHECK FASTENERS TO MAKE SURE THEY ARE TIGHT AND SECURE.

INTRODUCTION

How often have you needed a large guiding surface on a router table? Your Sears Craftsman Router Table with Unitized Fence comes with:

a. A unique 4" high unitized fence designed to assist for end grain routing for making tenons, sliding dovetails and tongue and groove joints along with most edge and face cutting operations.

b. A specially designed push block with quick clamp for back up and clamping boards up to 4" width for end grain routing.

c. An accurate and quick adjusting jointing fence adjustable to proper jointing depth of cut.

d. Reversing feature of unitized fence designed to enable routing operations like grooving; fluting; veining; crown molding etc. up to 2 1/2" away from the edge towards the middle of the board.

e. Two guards for operation on either side of the unitized fence.

f. Dust collecting attachment for most shop vac. hook ups.

If order to facilitate handling and minimize any damage that might occur during shipment, your new router table is packaged unassembled. We know you are anxious to see what your new tool will do, but a few minutes spent now carefully reading the following instructions, will result in less frustration and more enjoyable operation later.

Start by checking and accounting for all the loose parts. If any parts are missing, contact your local Sears retail or catalog outlet for replacement.

UNPACKING AND CHECKING CONTENTS

Refer to Parts List on Page 16

WARNING
YOU MUST READ AND UNDERSTAND ALL THE INSTRUCTIONS COMPLETELY BEFORE ATTEMPTING TO ASSEMBLE AND OPERATE YOUR ROUTER/ ROUTER TABLE.

ASSEMBLY OF TABLE

1. Turn the table upside down.

2. Place one of the table legs in one corner of the table as shown in Fig. #1.

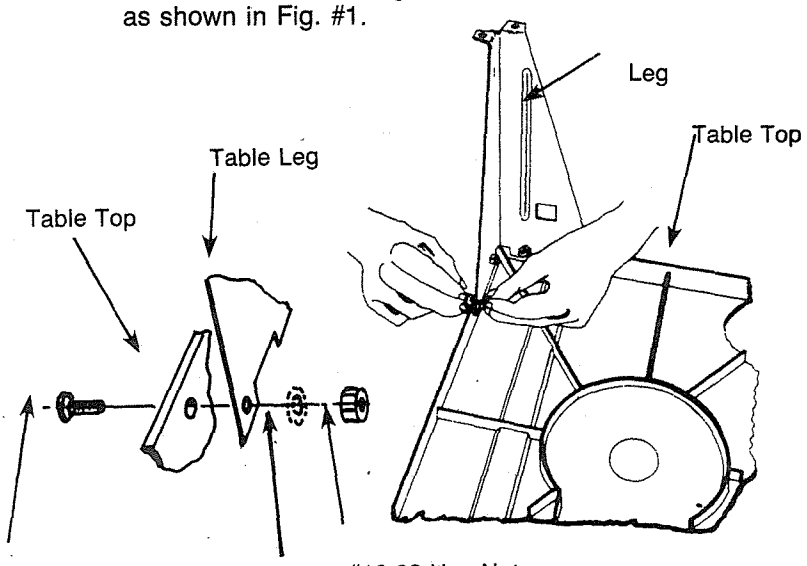


Fig. #1

3. Insert the 10-32 x 5/8 machine screws through the table top and leg.

4. Lightly tighten the nuts and lock washers on each screw. The lock washers should be against the inside of the leg.

5. Repeat for the remaining three legs.

6. Turn the table right side up and tighten all 16 screws and nuts with a screwdriver and wrench or pliers.

MOUNTING ROUTER TO TABLE

ALWAYS UNPLUG ROUTER BEFORE MOUNTING
(The table will accept Sears routers with bases up to 6" in diameter).

ATTACHING SEARS ROUTERS WITH THREE HOLE BASE PLATES.

1. Remove the router base plate (back plate) from the router.

2. While holding the router upside down, position it to the underside within the center ring of the table top as shown in Fig. #2.

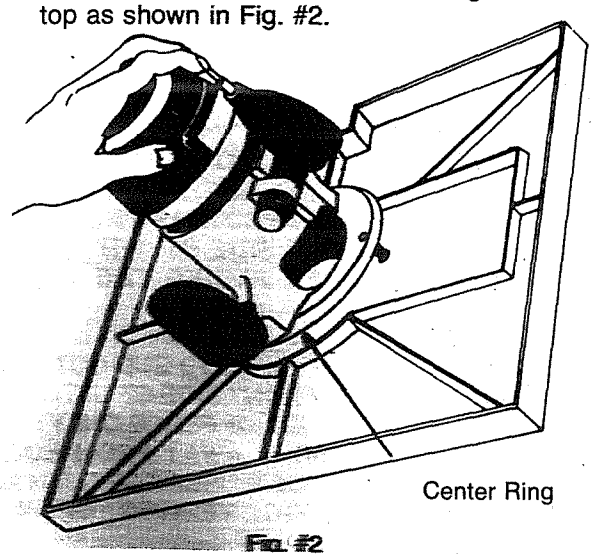


Fig. #2

3. Rotate the router until the three mounting holes in the router base line up with three of the holes in the table top. (It will be helpful if you orient the router such that you can easily reach the ON/OFF switch from the front of the table. Sears Craftsman 9 25182 Router Table Switch Package provides easy access to ON/OFF button).

4. Insert three #10-32 x 3/8″ long flat head machine screws (provided) through holes in the table top (See Fig. #3) and tighten securely into the router base.

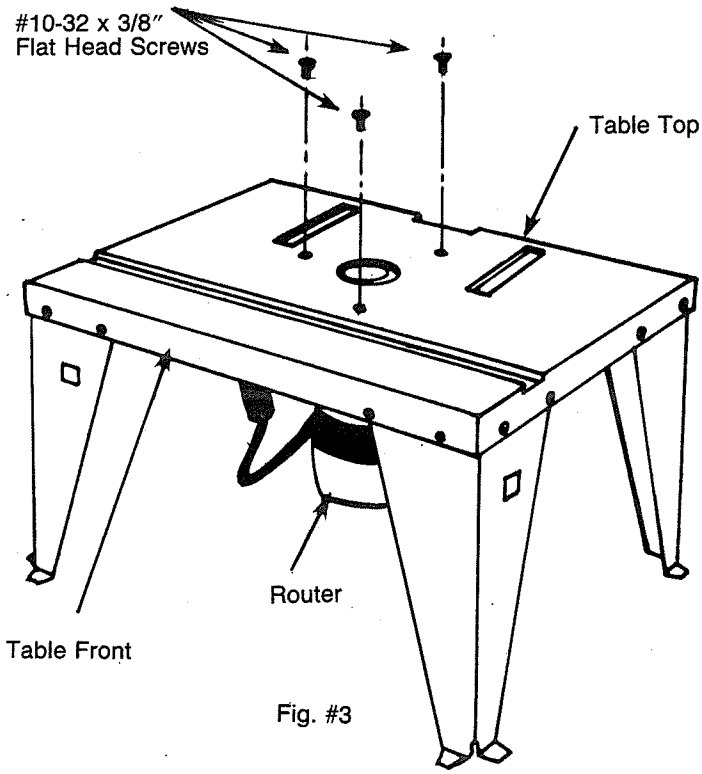
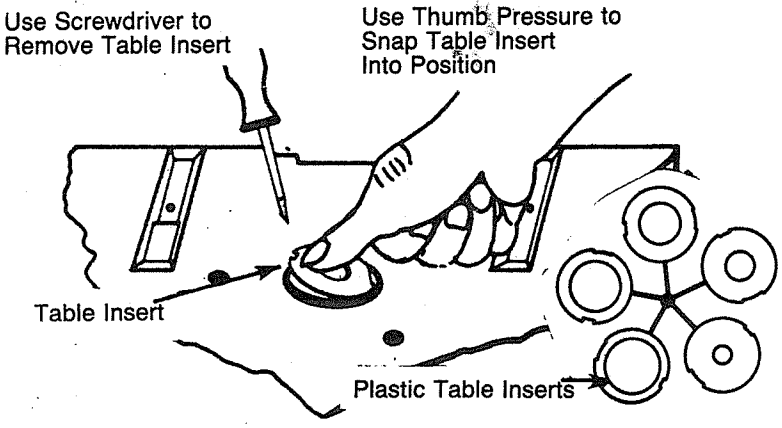


Fig. #3

SELECTING AND INSTALLING TABLE INSERTS

With the desired bit in the router, select a table insert which has a center hole slightly larger than the diameter of the router bit. Note: For bits larger than approximately 1 3/8″ diameter, do not use an insert.

The table inserts were designed to be snapped into the router table. Slide the large tang under the edge of the large hole in the router table as shown in Fig. #4. Using your thumb, press down on the insert until the small tang snaps into position.



To remove the insert, place the point of a small screwdriver into the slot (with the small tang) and pry the insert out of the router table.

WARNING: BEFORE ASSEMBLING AND ATTACHING UNITIZED FENCE TO TABLE, MAKE SURE THAT ROUTER IS UNPLUGGED AND THE BIT IS BELOW THE TOP SURFACE OF THE TABLE.

ASSEMBLY OF UNITIZED FENCE

ASSEMBLY OF JOINTING FENCE TO UNITIZED FENCE

1. Slide jointing fence through rectangular opening in the cavity provided on the unitized fence (ribs on the unitized fence will slide in the grooves on the underside of jointing fence). See Fig. #5.

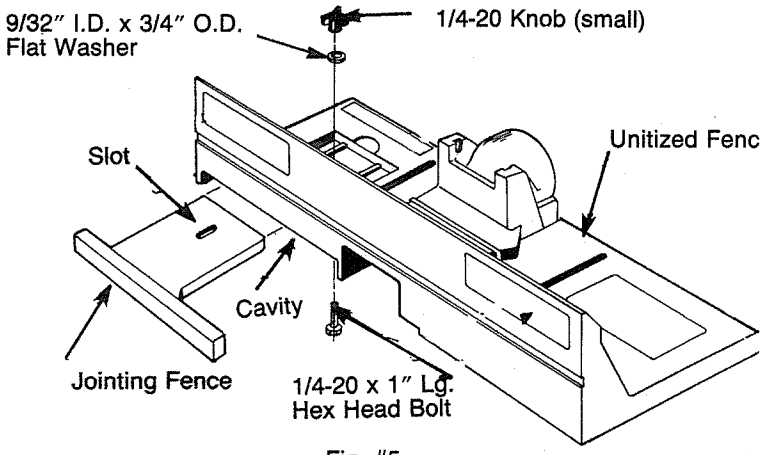


Fig. #5

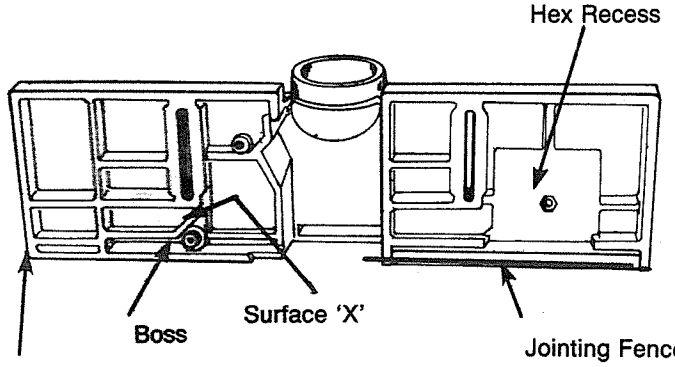
2. Insert 1/4-20 x 1″ long nex head bolt through the hole in the unitized fence (fron the underside) and the slot in the jointing fence.

3. While holding the head of the bolt in the hex recess on the underside of unitized fence, place a flat washer over the bolt and screw small 1/4-20 knob on bolt.

When knob is loosened, the jointing fence can slide back and forth in the cavity for proper jointing adjustment.

ASSEMBLY OF RETRACTABLE GUARD TO UNITIZED FENCE

1. Place the unitized fence upside down on a flat surface as shown in Fig. #6.



2. Orient the retractable guard as shown in Fig. #7. Position and hold the spring over its hub such that formed end of spring wraps over the guard as shown in Fig. #7.

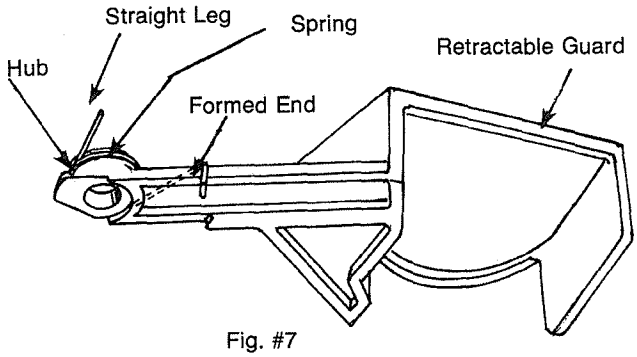


Fig. #7

3. While holding the spring over the hub and formed end over the guard, position and press the straight leg of spring against surface 'X' to align hole in hub over boss on unitized fence (see Fig. #8). Slip the guard over the boss. Spring will now be trapped between the guard and the fence. (Spring diameter is bigger than the hub diameter. You will need to use both hands to hold spring in proper position).

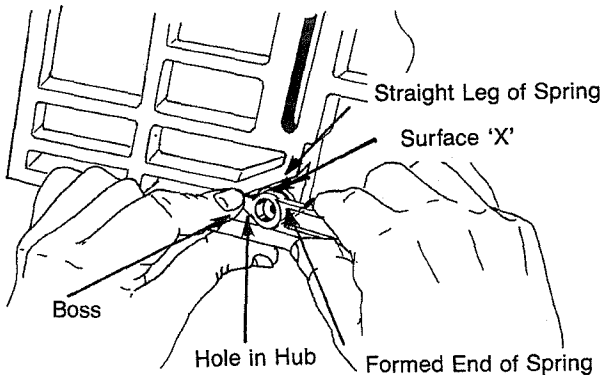


Fig. #8

4. Tightly secure retractable guard in place using self threading #8-10 x 9/16" long pan head plasform screw and a flat washer as shown in Fig. #9.

5. Swing guard a few times in the direction of arrow to see that it retracts out freely by itself and returns to its normal position over the router table hole. See Fig. #9.

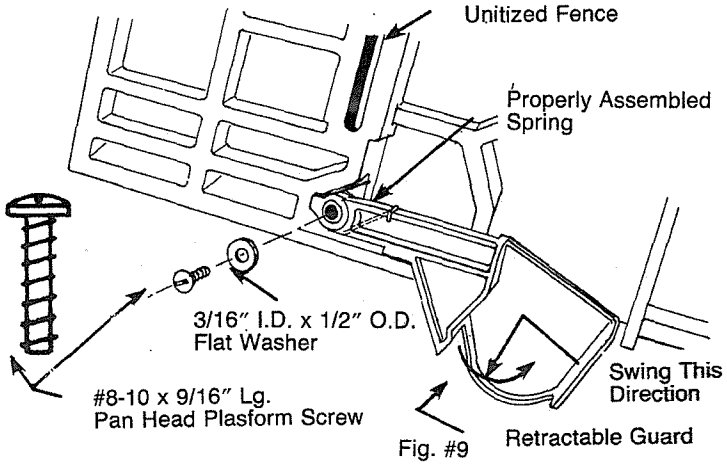

Unitized Fence
Properly Assembled Spring
3/16" I.D. x 1/2" O.D. Flat Washer
#8-10 x 9/16" Lg. Pan Head Plasform Screw
Swing This Direction
Retractable Guard

Fig. #9

NOTE: If the guard does not retract out freely, loosen screw just enough until it does retract out freely and snaps back to normal forward position by itself.

6. Turn the unitized fence right side up.

ATTACHMENT OF UNITIZED FENCE ASSEMBLY TO TABLE

ALWAYS UNPLUG ROUTER BEFORE ATTACHING FENCE TO AND REMOVING FROM TABLE.

1. Assemble unitized fence assembly to table as shown in Fig. #10.

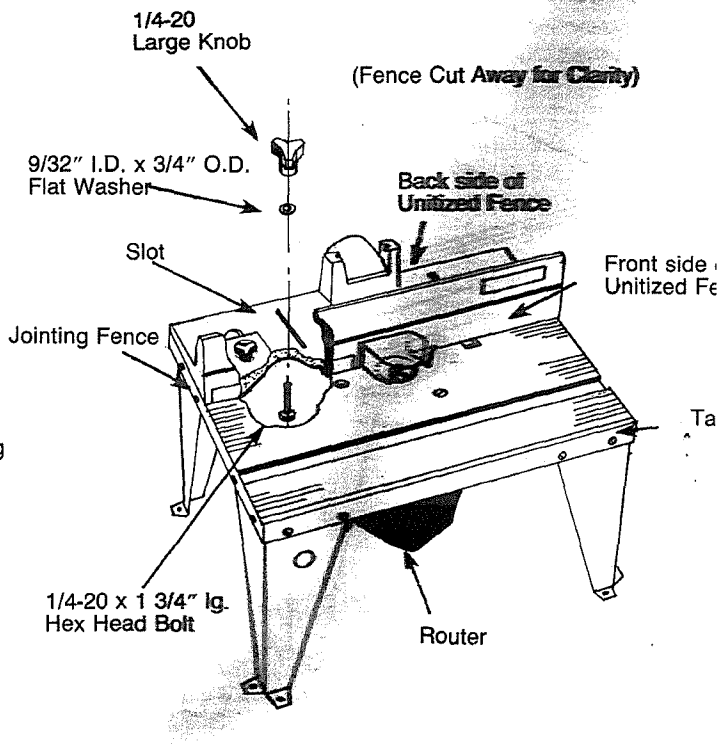


Fig. #10

2. Insert one of the 1/4-20 x 1 3/4" long hex head bolts through the hole in the table top (from the underside) and the slot in the fence.

3. While holding the head of the bolt in the hex recess on the underside of the tabletop, place a flat washer over the bolt and install a large 1/4-20 knob onto the bolt to loosely secure the fence.

4. Repeat for the other slot.

NOTE: The unitized fence assembly can be attached to table with either side facing the front. To use other side, just remove the knobs and turn the fence around.

ASSEMBLY OF PUSH BLOCK

1. Screw the small end of clamp rod into threaded hole in clamp plate until the plate bottoms on its shoulder (make sure clamp plate is oriented such that letter 'C' is facing outwards as shown in Fig. #11).

2. Tightly secure clamp plate to clamp rod using 1/4" helical lock washer and a hex nut.

3. Insert the opposite threaded end of clamp rod through hole in push block and install a flat washer and a wing nut on to it. See Fig. #11.

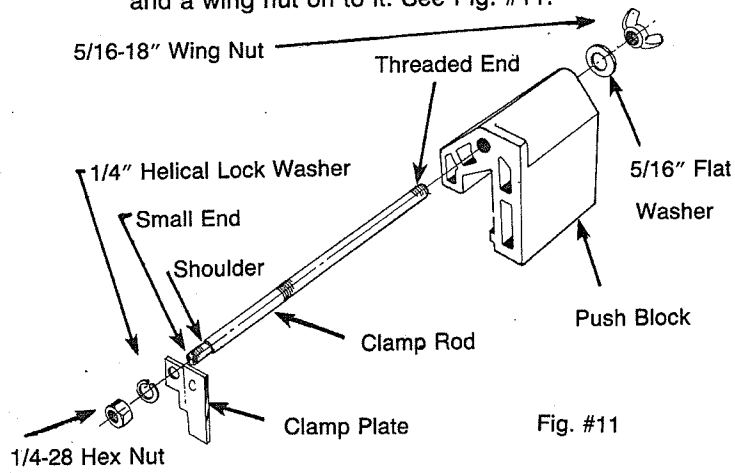


Fig. #11

WARNING: ROUTER VIBRATIONS SOMETIMES CAN CAUSE 1/4-28 HEX NUT AND CLAMP PLATE TO GET LOOSE! PERIODICALLY CHECK FASTENERS AND CLAMP PLATE TO MAKE SURE THEY ARE TIGHT AND SECURE.

MOUNTING PUSH BLOCK ASSEMBLY ON UNITIZED FENCE

Clamp plate when free, tries to swing in the direction of arrow (See Fig. #12a) due to its weight.

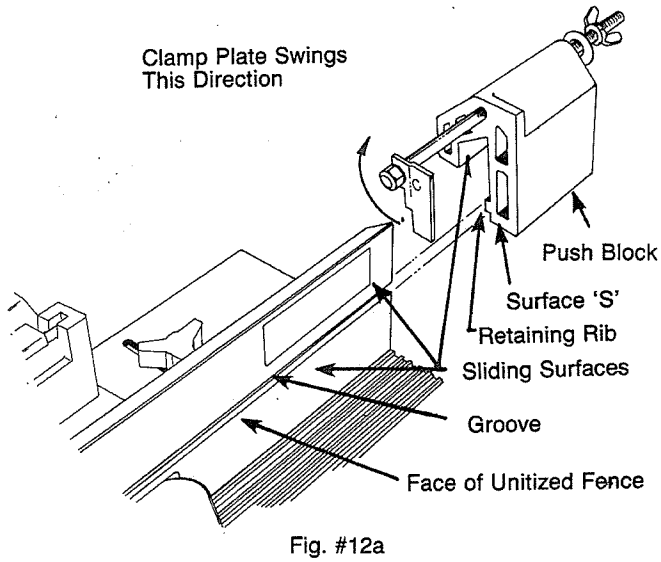


Fig. #12a

1. Mount push block assembly on the unitized fence by supporting clamp plate against the face of the fence (Fig. #12b) and aligning retaining rib on push block with the groove in the face of unitized fence. See figures #12a and #12b.

2. Slide push block assembly back and forth along entire length of unitized fence to see that it slides freely.

NOTE: a. Remove dust and chips from sliding surfaces of push block and unitized fence as needed to maintain good sliding motion.

b. Occasional application of furniture spray wax on sliding surfaces of PUSH BLOCK ONLY will greatly improve the sliding motion.

FOR ROUTING ON ENDS (TENONS, SLIDING DOVETAILS, ETC.) WORKPIECE IS HELD AGAINST FACE OF UNITIZED FENCE AND CLAMPED BETWEEN CLAMP PLATE AND SURFACE 'S' OF PUSH BLOCK. SEE FIG. #12a.

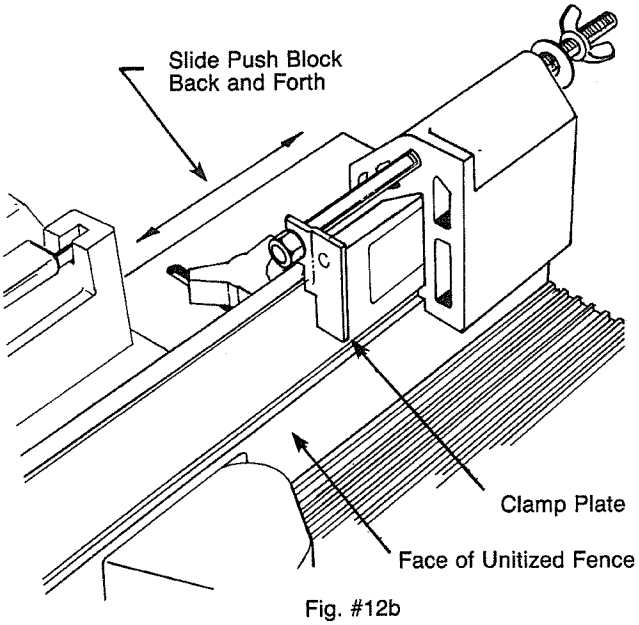


Fig. #12b

ASSEMBLY OF GUARD TO UNITIZED FENCE

1. Assemble guard to unitized fence as shown in Fig. #13.

2. While holding the guard at a slight angle as shown, insert tab on one side of guard into hole inside the slot on fence.

3. Hold the guard against this slot, straighten it into a vertical position and; insert the opposite tab into the mating slot. See Fig. #13.

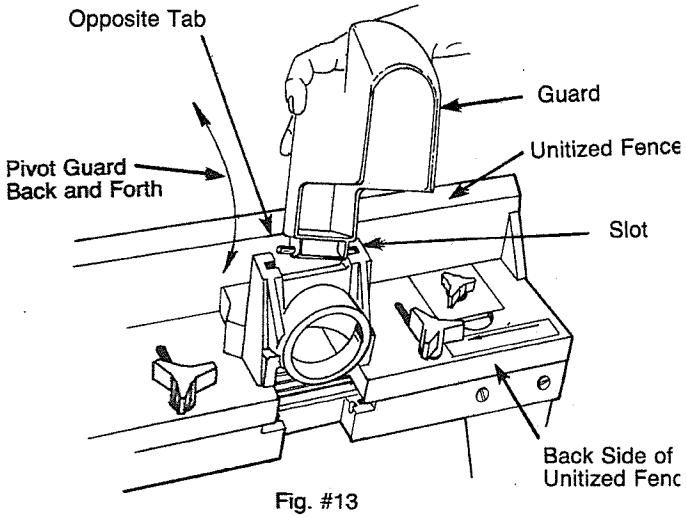


Fig. #13

4. Pivot guard back and forth a few times to make sure that it moves freely.

NOTE: Once the guard has been installed, do not remove it for any reason.

DUST COLLECTING ATTACHMENT

Unitized fence is provided with a hookup for most Sears Craftsman 2 1/2" and 1 1/4" hose diameter vacs.

FOR ALL OPERATIONS REQUIRING USE OF FRONT-SIDE OF UNITIZED FENCE, connect shop vac as follows:

1. Raise guard and lean it against the fence.
2. Attach 2 1/2" hose diameter nozzle as shown in Fig. #14a.

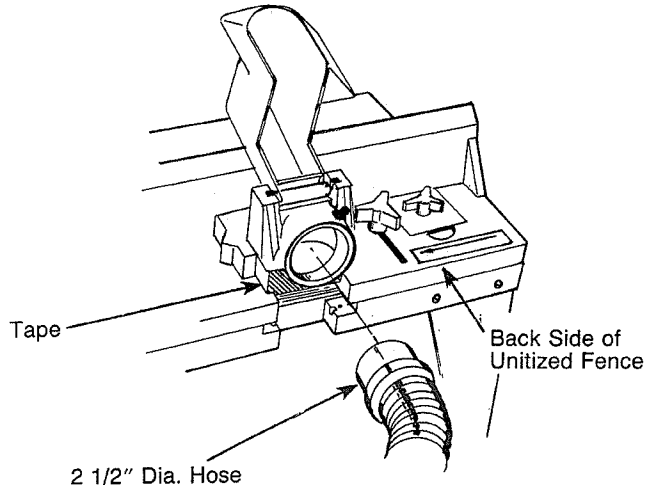


Fig. #14a

3. Attach 1 1/4" hose diameter nozzle as shown in Fig. #14b.

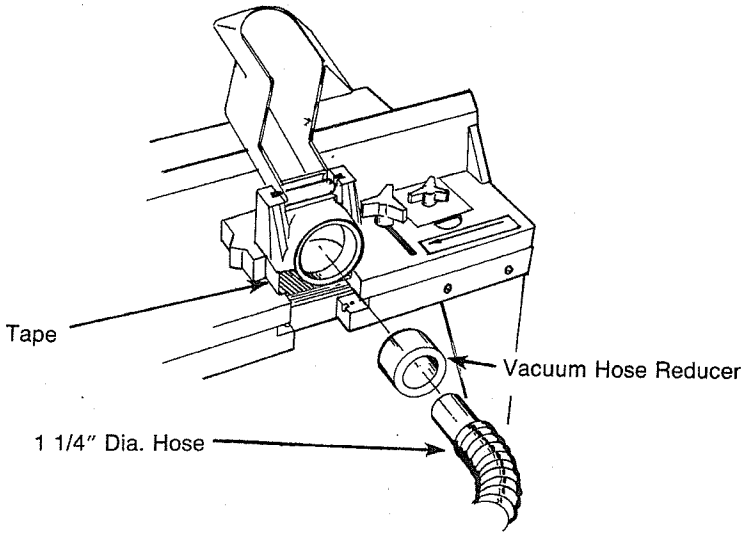


Fig. #14b

4. Lower guard and let it rest on the vac hose.

NOTE: For maximum suction efficiency, stick a piece of tape or use a piece of scrap wood to cover up the opening in the rear of the fence as shown in Figures 14a and 14b. Uncover opening after use.

FOR OPERATIONS REQUIRING USE OF BACK-SIDE OF UNITIZED FENCE, DO NOT CONNECT SHOP VAC. AS IT WILL HINDER OPERATION. THE BACKSIDE OF FENCE IS ONLY FOR CUTTING OPERATIONS ON THE UNDERSIDE OF WORKPIECE. THE WORKPIECE DURING SUCH OPERATIONS COMPLETELY COVERS THE ROUTER BIT AND THE DUST CANNOT BE VACUUMED.

WARNING: OPERATING ROUTER TABLE WITHOUT USE OF SHOP VAC. MAY RESULT IN EXCESSIVE COLLECTION OF SAW DUST AND CHIPS UNDER THE FENCE AND THE RETRACTABLE GUARD AREA.

FOR YOUR OWN SAFETY, ALWAYS UNPLUG THE ROUTER AND CHECK FUNCTION OF GUARD BEFORE EACH USE. REMOVE DUST AND CHIPS FROM GUARD AREA AS NEEDED TO MAINTAIN GUARD FUNCTION. KEEP WORK AREA CLEAN. REMOVE UNITIZED FENCE FROM TABLE (MAKE SURE ROUTER IS UNPLUGGED) TO CLEAR DUST AND CHIPS TRAPPED BETWEEN FENCE AND TABLE TOP.

MOUNTING THE ROUTER TABLE

THE ROUTER TABLE MUST ALWAYS BE FIRMLY AND SECURELY MOUNTED TO A WORK SURFACE BEFORE USE. FAILURE TO DO SO COULD CAUSE TABLE TO TIP OVER OR SLIDE RESULTING IN PROPERTY DAMAGE AND/OR SERIOUS PERSONAL INJURY.

Each leg has (2) holes at the bottom for mounting. Firmly secure router table to work surface using appropriate fasteners (not provided) as shown in Fig. #15.

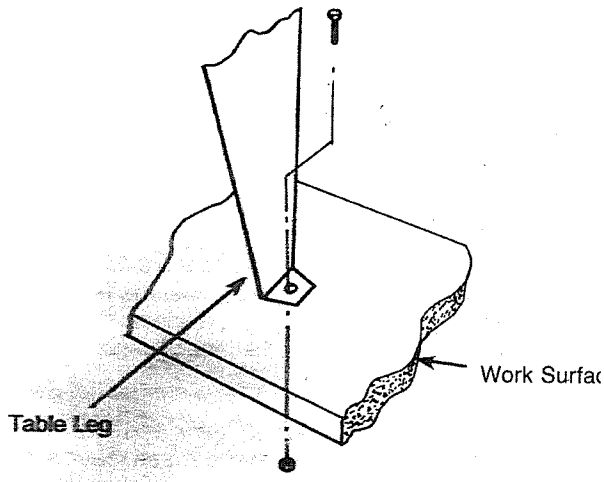


Fig. #15

For added versatility, secure the table to a piece of 1/2" or thicker plywood which can be "C" clamped to your work surface.

ASSEMBLY OF MITER GAUGE

Assemble protractor head to miter bar as shown in Fig. #16.

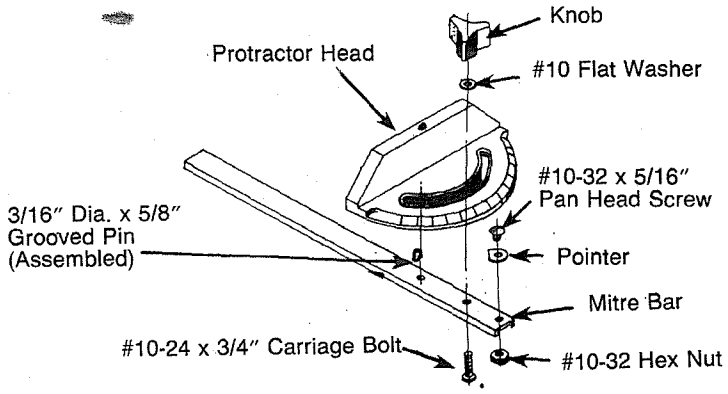


Fig. #16

ALIGNMENT OF UNITIZED FENCE TO MITER BAR SLOT

1. Measure distance from each end of unitized fence to edge 'E' of miter bar slot on the table as shown in Fig. #17. If both distances are the same, the fence is parallel to miter bar slot. If not, loosen large knobs and adjust fence accordingly. Tighten both knobs.

2. Position miter gauge on table as shown in Fig. #17.

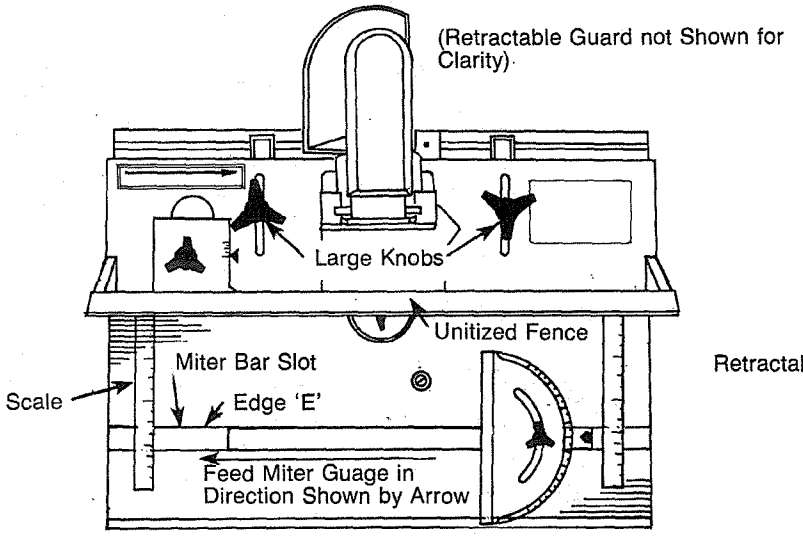


Fig. #17

OPERATION — ROUTING USING FRONTSIDE OF UNITIZED FENCE

ALWAYS UNPLUG THE ROUTER BEFORE MAKING ANY SETTING, ADJUSTMENTS, OR CHANGING BITS.

WHEN ROUTING, ALWAYS FEED AGAINST THE ROTATION OF THE CUTTER. FEED WORKPIECE IN THE DIRECTION OF ARROW AS SHOWN ON THE LABEL ON THE SIDE OF THE FENCE BEING USED (when facing the table front).

The unitized fence on your table is provided as a guide against which the workpiece should be held for accuracy in routing. Free hand routing (not holding work against the fence) is hazardous and should be strictly avoided.

Shop vac. with either 2 1/2" diameter or 1 1/2" diameter hose nozzle should be connected to the dust collection attachment when using the router table.

ADJUSTING DEPTH AND HEIGHT OF CUT

In order to retract the guard and have full access to the router bit for making adjustments, select a board that is smooth with its edges and ends true to each other and its surfaces and:

1. Mark lines 'A' and 'B' on the end of this board. Line 'A' for desired depth of cut (amount of material you want to remove) and line 'B' for desired cutting height. See Fig. #18.

2. Clamp this board against the face of the fence with edge resting on table top and end marked with lines 'A' and 'B' close to the bit. See Fig. #18. (This will retract guard inside fence and provide access to the bit for making adjustments. MAKE SURE ROUTER IS UNPLUGGED WHEN CLAMPING BOARD AND MAKING ADJUSTMENTS).

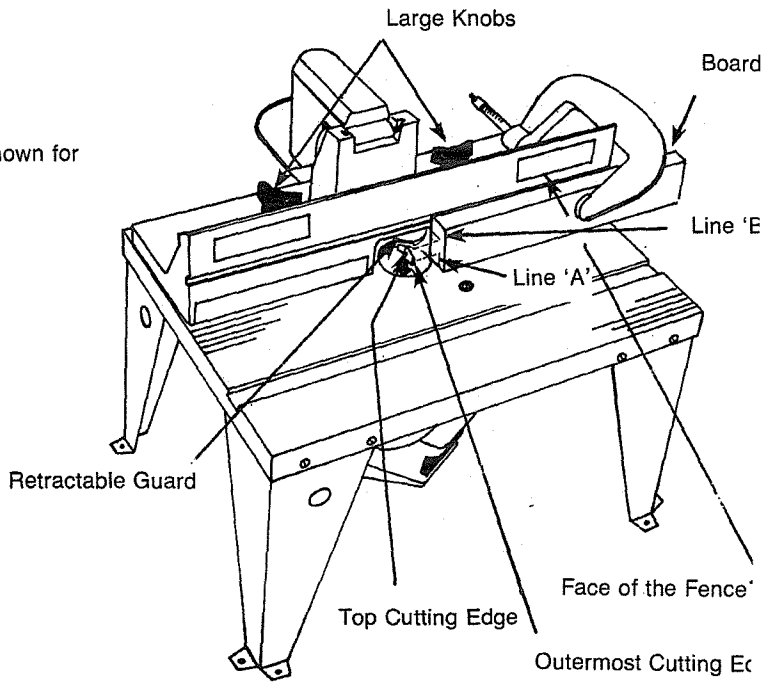


Fig. #18

3. Loosen both large knobs that allow movement of fence and move fence forward and backward until outermost cutting edge of router bit is aligned with line 'A'. Tighten both knobs.

4. Raise or lower the router until top cutting edge of bit is aligned with line 'B'. (Refer to your router's owner's manual for adjusting your router properly). AFTER MAKING THIS ADJUSTMENT, BE SURE ROUTER IS SECURELY TIGHTENED IN THE ROUTER BASE, THE BIT IS SECURELY TIGHTENED IN THE ROUTER CHUCK, AND ROUTER BASE IS TIGHTLY SECURED TO TABLE TOP.

5. Remove the board from the fence.

WARNING: WHEN ADJUSTING HEIGHT OF ROUTER BIT FOR ANY DESIRED CUT, MAKE ABSOLUTELY CERTAIN THAT TOP OF BIT IS BELOW THE INSIDE SURFACE OF RETRACTABLE GUARD AS SHOWN IN FIG. #19. CHECK TO SEE THAT GUARD RETRACTS FREELY IN AND OUT OF FENCE TO ITS NORMAL POSITION OVER THE ROUTER TABLE HOLE. DO NOT OPERATE ROUTER IF ANY PART OF THE BIT CONTACTS THE GUARD.

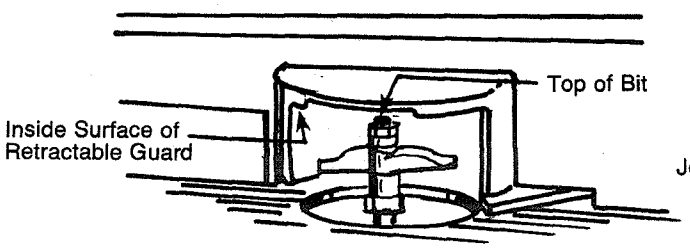


Fig. #19

NOTE: The procedure described above is intended to provide a way of retracting and holding the guard to have full access to the router bit for making adjustments. Workpiece to be routed could be substituted for the scrap board for making adjustments.

USING ROUTER TABLE AS JOINTER (FULL EDGE CUTTING)

For maximum strength and accuracy, boards to be jointed together should be smooth and true. The edges should be true to the workpiece surface. You can true the edges on your router table using a straight bit.

1. Check to see if face of jointing fence is flush with the face of unitized fence. If not, loosen small knob on jointing fence and push jointing fence inside the cavity in unitized fence. Tighten knob on jointing fence.

   NOTE: The jointing fence provides a continuous support for the workpiece, as it is fed beyond the router bit. It compensates for the gap created by the removal of material by the router bit.

2. Adjust depth of cut (material you want to remove) and router bit height as described before for Fig. #18. Tightly secure the fence and the router as described before. (MAKE SURE ROUTER IS UNPLUGGED WHEN MAKING ADJUSTMENTS).

3. Check your adjustments by turning the router 'ON' and feeding a piece of scrap wood a few inches beyond router bit. Then stop and turn router 'OFF'.

   NOTE: Feed work in the direction of arrow shown on label on the frontside of unitized fence (when facing table front).

4. Loosen knob on jointing fence and move it out, flush against the finished edge of scrap wood. Retighten the knob. See Fig. #20.

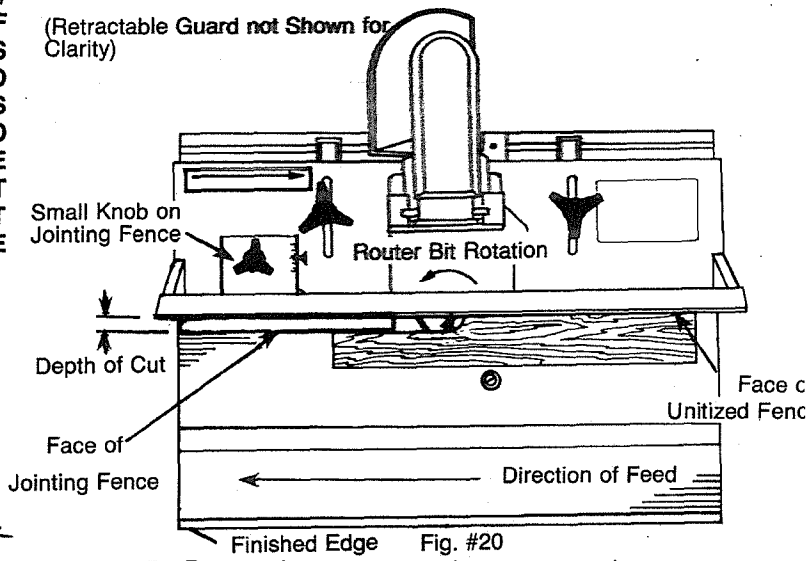


Fig. #20

5. Repeat the test cut on the scrap wood.

6. The router table is now ready for use.

   NOTE: For best jointing results, take very shallow cuts — 1/32″ or less.

USING ROUTER TABLE FOR EDGE CUTTING WITH NON-PILOTED BITS

1. Position the jointing fence such that its face is flush with the face of unitized fence. Tighten small knob on jointing fence. See Fig. #21.

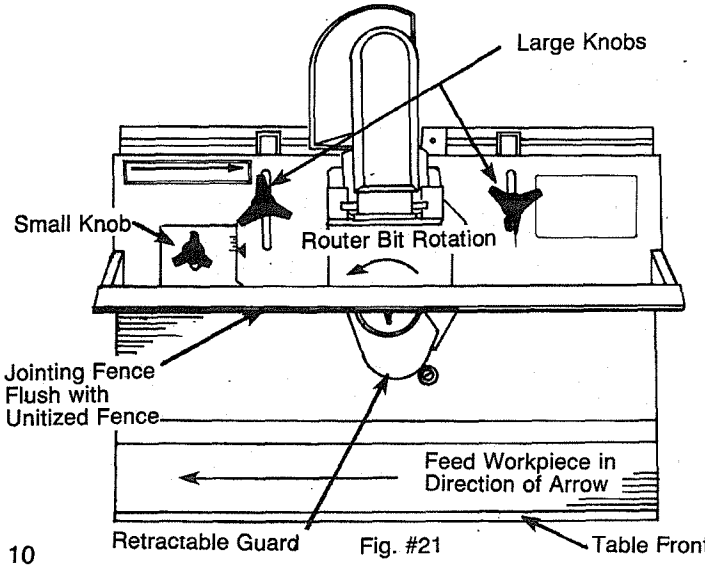


Fig. #21

2. Adjust depth of cut (material you want to remove) and router bit height as described before. Tighten both large knobs to lock fence on table. Tightly secure the router. (MAKE SURE ROUTER IS UNPLUGGED WHEN MAKING ADJUSTMENTS).

3. Test cut a piece of scrap wood to make sure your adjustments are satisfactory.

   NOTE: Feed work in the direction of arrow shown on label on frontside of unitized fence (when facing table front).

4. The router table is now ready for use.

   NOTE: If you have purchased a MOLD MAKER BIT SET (Sears Craftsman 9_21255) for making moldings on your router table, set the unitized fence in EDGE CUTTING MODE for making the first cut on your workpiece using Bit #25527. See Fig. #22.

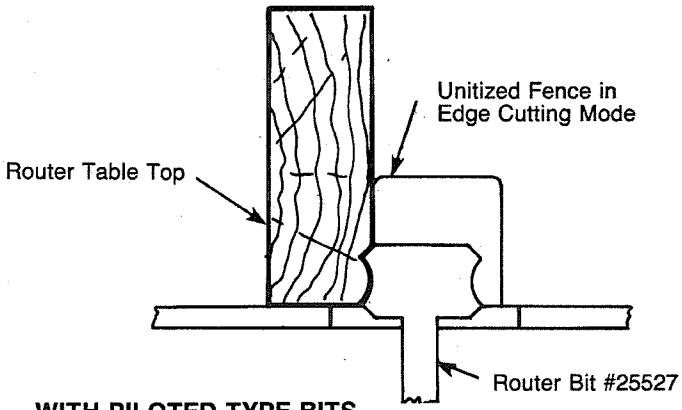


Fig. #22

WITH PILOTED TYPE BITS

When bits with pilots are used to control the cutting depth:

1. Position the jointing fence in the same manner as with non-piloted bits.

2. Move the unitized fence back only enough to permit the pilot to control the cutting depth. Positioning the unitized fence as close to the pilot as possible will serve as a back-up, and will help prevent chances of an accident, and possible personal injury. See Fig. #23.

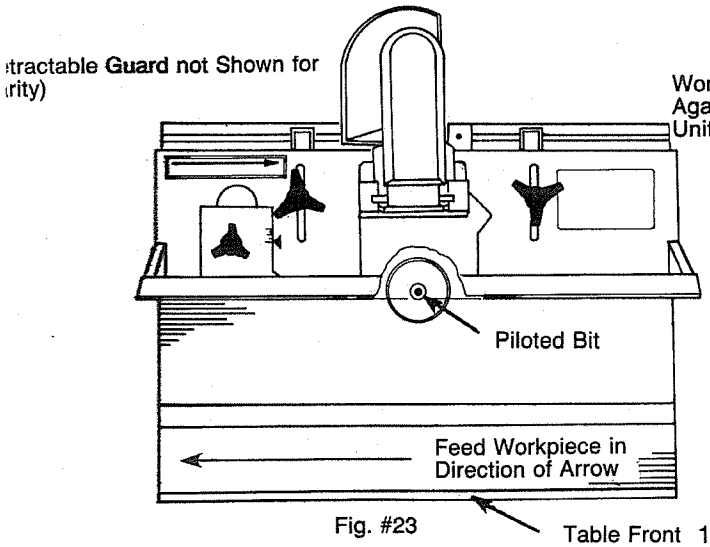


Fig. #23

NOTE: If you have purchased RAIL AND STILE CUTTERS (Sears Craftsman 9_21257) for making cabinet door frames on your router table, MAKE SURE THAT FRAME THICKNESS is not more than 3/4". If frame thickness is more than 3/4", the top of the bit, as shown in Fig. 'A' of Rail and Stile Cutters instructions, will interfere with retractable guard on your unitized fence. See Fig. #24 and Fig. #19.

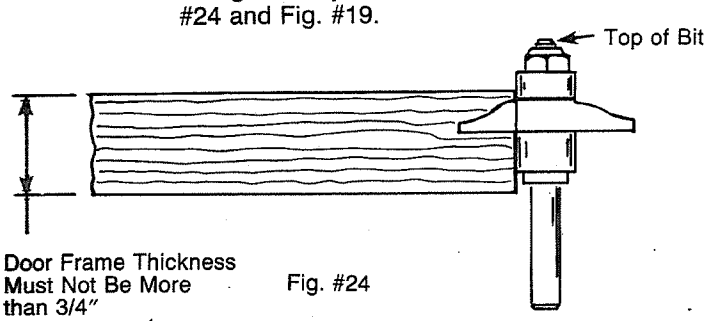


Fig. #24

USING ROUTER TABLE FOR END CUTTING

When routing on ends of workpiece for making tenons, sliding dovetails and tongue and groove joints, the workpiece must be made smooth with both edges and ends made true to each other and its surfaces.

NOTE: The push block and clamp plate assembly will not accommodate workpiece wider than 4".

EXAMPLE: CUTTING TENONS

1. Make certain that jointing fence is locked in position with its face flush with that of unitized fence.

2. Mount push block assembly on unitized fence as shown before in Figs. #12a and #12b.

3. Install proper table insert into the table top hole.

4. Mark lines 'A' and 'B' on the edge of the workpiece close to the end to be cut. Line 'A' for FULL DEPTH OF CUT (total amount of material you want to remove) and line 'B' for FULL DESIRED HEIGHT OF TENON. See Fig. #25.

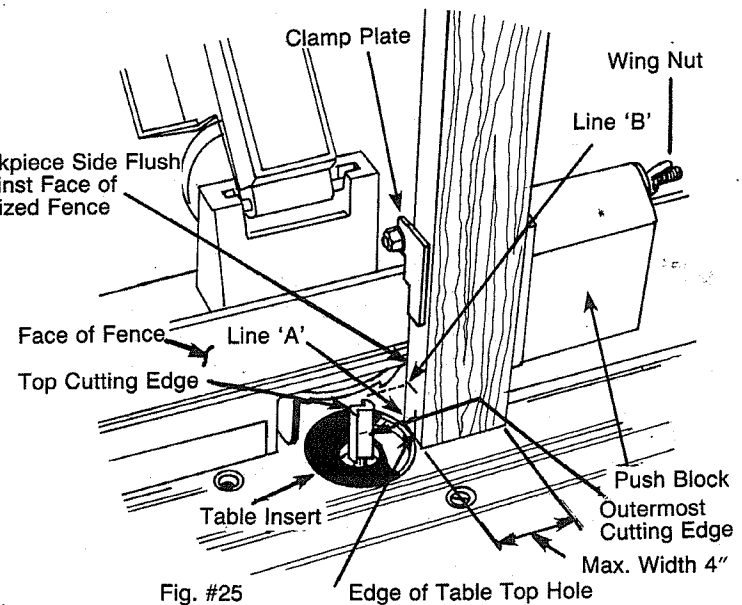


Fig. #25

WARNING: DO NOT SET DEPTH OF CUT MORE THAN 3/8" (FIG. #26). IF DEPTH OF CUT IS MORE THAN 3/8", THE EDGE 'E' OF WORKPIECE WHEN SLIDING ACROSS WILL INTERFERE WITH PORTION 'P' OF GUARD. THE GUARD THEN WILL NOT RETRACT INSIDE FENCE AND HENCE YOU WILL NOT BE ABLE TO SLIDE WORKPIECE ACROSS THE BIT TO MAKE THE CUT. SEE FIG. #27.

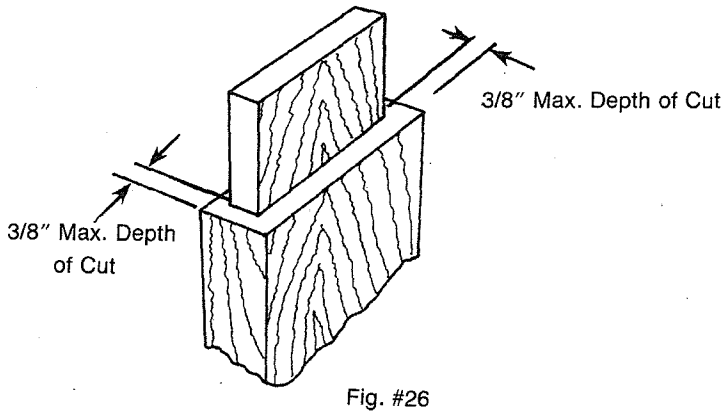


Fig. #26

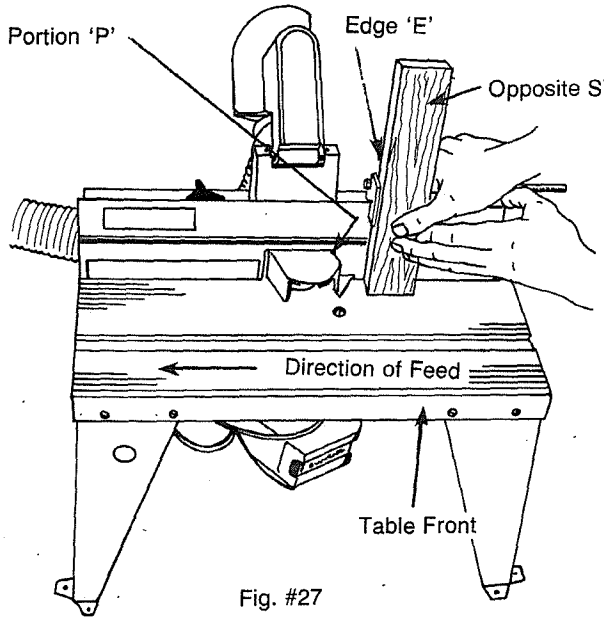


Fig. #27

5. Position workpiece between clamp plate and push block such that its side is held flush against face of the unitized fence, the end to be cut is resting on the edge of the table top hole and edge marked with lines 'A' and 'B' is facing the router bit. Clamp workpiece in this position by snugly tightening the wing nut on clamp rod while making sure that clamp plate stays oriented on workpiece as shown in Fig. #25. (This will retract guard inside the fence and provide access to the bit for making adjustments. MAKE SURE ROUTER IS UNPLUGGED WHEN POSITIONING AND CLAMPING WORKPIECE AND MAKING ADJUSTMENTS).

NOTE: Tighten wing nut just enough to clamp workpiece in position. OVERTIGHTENING wing nut could cause binding in the sliding motion of push block which in turn may result in variations and/or steps in the finished tenon surface when cut. See Fig. #29.

6. Slide workpiece close to the bit and adjust unitized fence and the router as described before so that outer most cutting edge of bit is aligned with line 'A' and top cutting edge of bit is aligned with line 'B'. See Fig. #25. Tightly secure the fence and the router as described before in ADJUSTING DEPTH AND HEIGHT OF CUT.

7. Slide push block and therefore workpiece back to let guard swing out to its normal position as shown in Fig. #27.

8. Turn router and shop vac 'ON'. While holding push block and GUIDING WORKPIECE AGAINST FENCE with both hands (Fig. #27) and FINGERS AT SAFE DISTANCE ABOVE GUARD AND SPINNING BIT, feed workpiece across the bit to make FULL DEPTH OF CUT IN ONE PASS. (DO NOT STOP FEED UNTIL WORKPIECE IS FAR ENOUGH BEYOND SPINNING BIT TO ALLOW GUARD TO RETRACT OUT FULLY TO ITS NORMAL POSITION).

NOTE: Clamp and test cut a piece of scrap wood to check your adjustments before making your finished cut.

9. Turn router and shop vac 'OFF'. Unclamp workpiece, and slide push block back.

10. Position and clamp the opposite side of workpiece in the same manner as described in Step #5 (make sure the wing nut is tight just enough to clamp workpiece in position and end to be cut is resting on the edge of table top hole). Repeat steps #7, #8, and #9.

11. To cut ends of the tenon, position and clamp workpiece in the same manner as in step #5 above except edge of workpiece should be held flush against face of fence and end to be cut should be resting on edge of table top hole. See Fig. #28. Repeat steps #7, #8, #9, and #10.

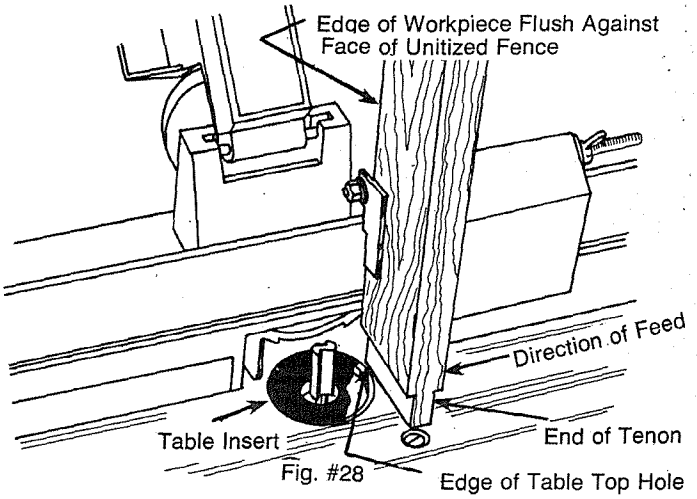
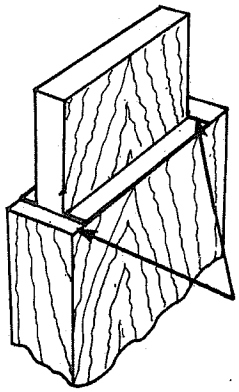

Edge of Workpiece Flush Against Face of Unitized Fence
Direction of Feed
Table Insert
End of Tenon
Edge of Table Top Hole

Fig. #28

NOTE: When cutting tenons, always clamp workpiece with end to be cut resting on edge of table top hole. This will minimize steps in finished tenon surface (Fig. #29) due to variations in the table top flatness.



Steps in Finished Tenon Surface

Fig. #29

WARNING: ALWAYS CUT FULL DEPTH ON ALL 4 SIDES OF TENON IN ONE PASS ACROSS THE BIT. ONCE THE SIDES ARE CUT AND IF STEPS OR OTHER IMPERFECTIONS ARE NOTICED ON FINISHED TENON SURFACE, CLEAN THEM WITH WOOD CHISEL, SAND PAPER OR FILE, ETC. DO NOT TRY TO CLEAN THEM BY RE-SETTING WORKPIECE ON ROUTER TABLE AND FENCE. WORKPIECE MAY INTERFERE WITH GUARD (SEE FIG. #27 ABOVE) WHICH IN TURN WILL PREVENT IT FROM SLIDING ACROSS THE BIT.

OPERATION — ROUTING USING BACKSIDE OF UNITIZED FENCE

USE BACKSIDE OF FENCE ONLY FOR ROUTING OPERATIONS AWAY FROM EDGE ON THE UNDERSIDE OF WORKPIECE SUCH AS GROOVING; FLUTING; VEINING; CROWN MOLDING, ETC.

ALWAYS UNPLUG THE ROUTER BEFORE MAKING ANY SETTING, ADJUSTMENTS, OR CHANGING BITS.

WHEN ROUTING ALWAYS FEED AGAINST THE ROTATION OF THE CUTTER. FEED WORKPIECE IN THE DIRECTION OF ARROW AS SHOWN ON LABEL ON THE SIDE OF FENCE BEING USED (when facing the table front).

DO NOT CONNECT SHOP VAC. WHEN USING BACKSIDE OF FENCE. THE HOSE WILL HINDER OPERATION.

For maximum accuracy, one edge of your workpiece (edge sliding against the fence) must be true and straight. Set up your fence as follows:

1. Remove both large knobs and 1/4-20 x 1 3/4" lg. hex head bolts, turn the unitized fence around and attach it back to table with backside of fence facing the table front. See Fig. #30. (MAKE SURE ROUTER IS UNPLUGGED WHEN REMOVING AND ATTACHING FENCE TO TABLE).

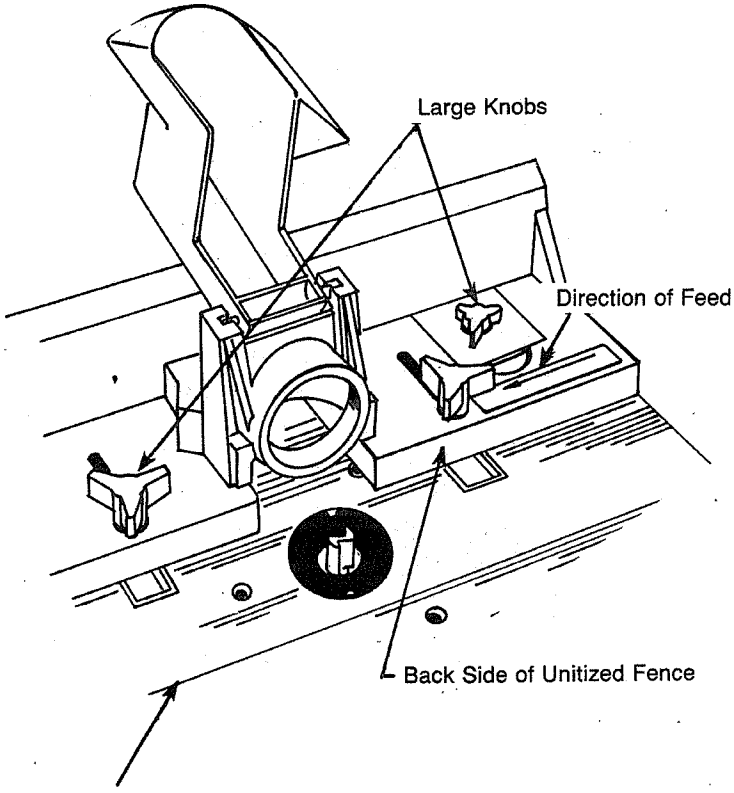


Fig. #30

2. Raise guard and let it lean against the fence.
3. Position the fence behind the router bit for the desired cutting depth (the distance of the cut from the edge of the workpiece, as shown in Fig. #31).

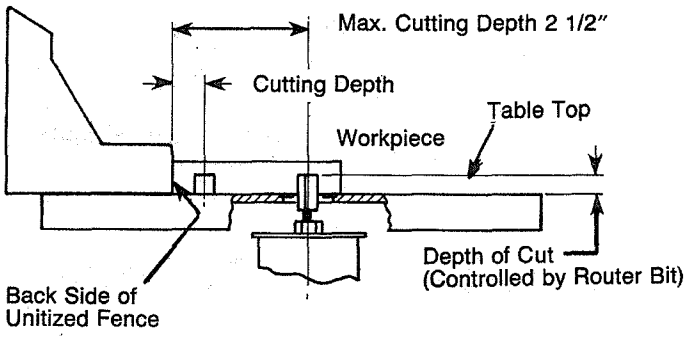


Fig. #31

4. Securely tighten both knobs and LOWER THE GUARD OVER THE BIT.

5. Make the cut by sliding straight edge of workpiece against the fence. Use a push stick as shown in Fig. #32. (For each successive cut, the fence would need to be readjusted).

   NOTE: Test cut a piece of scrap wood before making your finish cut. Feed workpiece in the direction of arrow shown on fence label (Fig. #32).

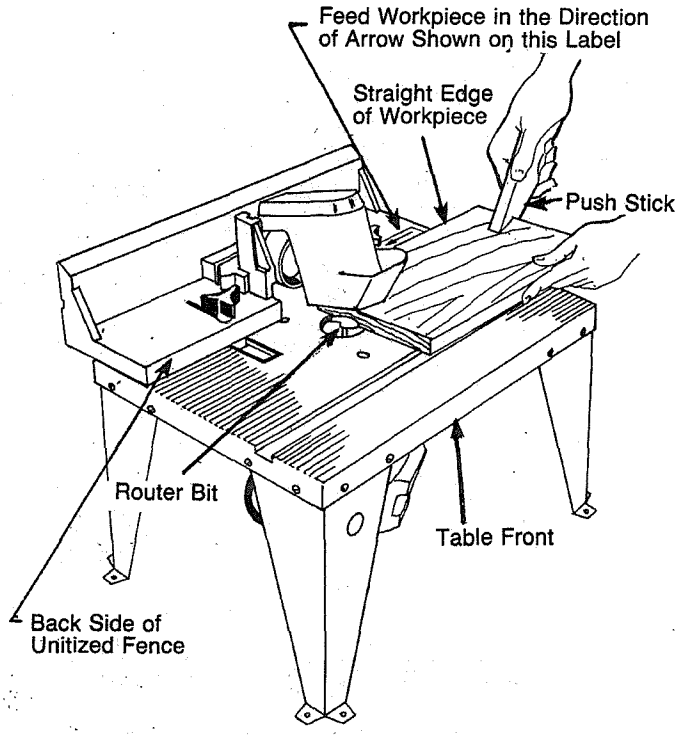


Fig. #32

NOTE: When routing deep cuts (controlled by router bit) in a workpiece, remove material in increments to prevent your router from overloading. Repeat operation with several passes until the desired depth is achieved.

PROTRACTOR

Your protractor will serve as a handy aid when extra support is needed for routing small workpieces or ends of large workpieces. See Fig. #33.

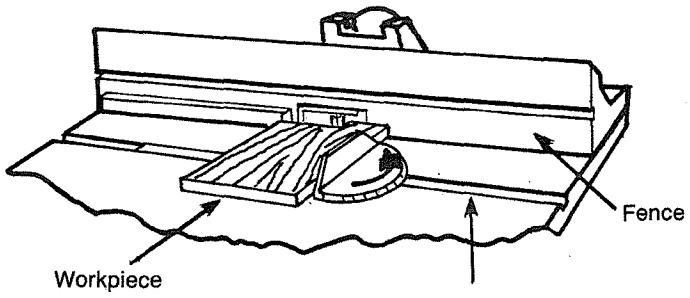


Fig. #33

NOTE: FOR ALL ROUTING OPERATIONS REQUIRING USE OF MITER GAUGE ALONG WITH THE FENCE, BE SURE TO ALIGN FENCE WITH MITER BAR SLOT BEFORE MAKING ANY CUTS. SEE FIG. #17.

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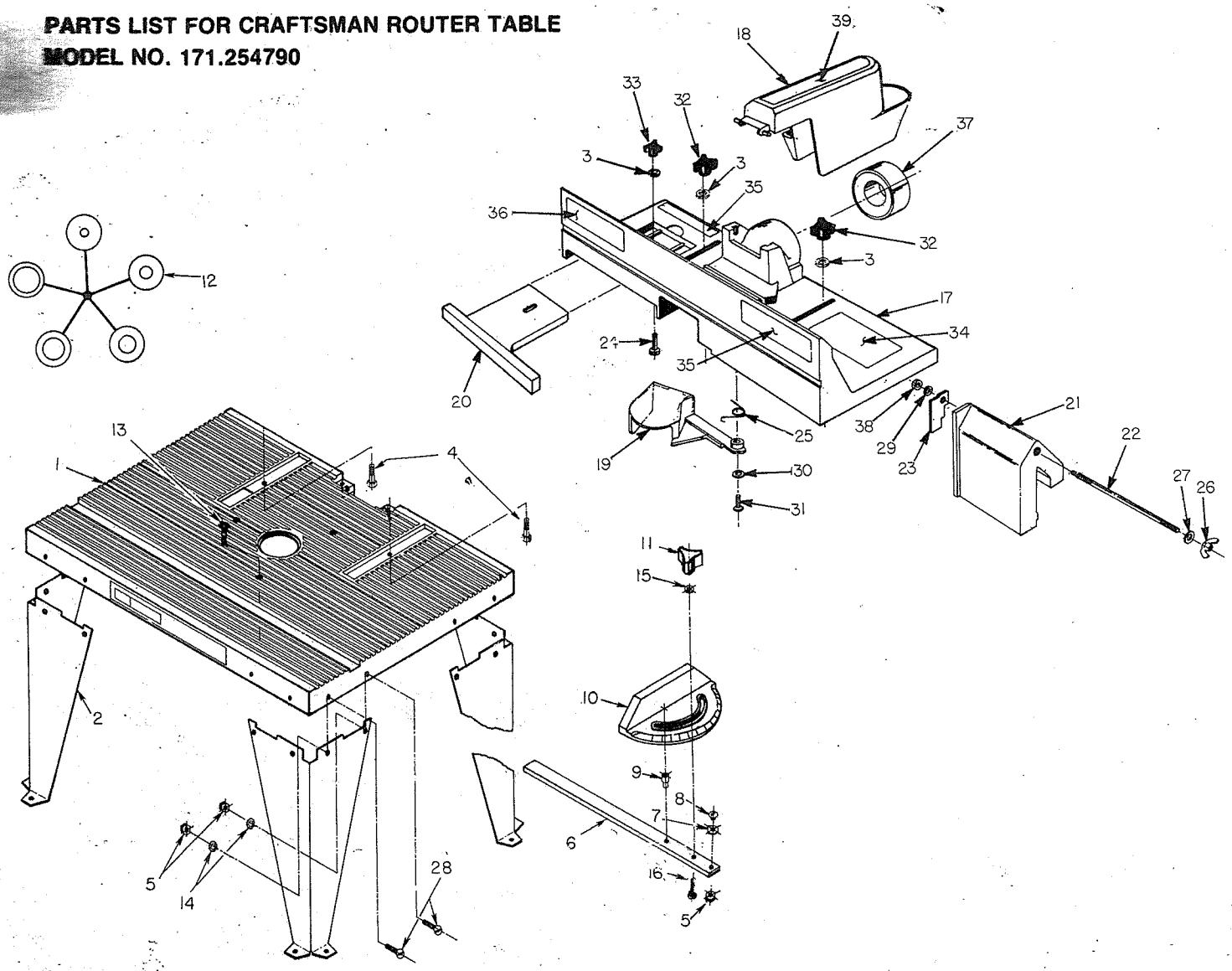
PARTS LIST FOR CRAFTSMAN ROUTER TABLE
MODEL NO. 171.254790



Key No.	Part No.	Description	Quan.
1	31L-431	Router Table Top	1
2	31L-429	Table Leg	4
*3	F29A-306-14	Flat Washer 9/32 I.D. x 3/4 O.D.	3
*4	F29A-489-3	Hex Hd Bolt 1/4-20 x [illegible] lg.	2
*5	F29A-242-2	Hex. Mach. Screw Nut #10-32	17
6	31L-559	Miter Bar	1
7	31L-438	Pointer	1
*8	F29A-264-8	Pan Hd. Mach. Screw #10-32 x 5/16	1
9	29L-183	Grooved Pin 3/16 dia. x 5/8 type D	1
10	29L-293	Protractor Head	1
11	31L-560	Knob	1
12	29L-202	Plastic Insert	5
*13	29A-298-13	Flat Hd. Mach. Screw #10-32 x 3/8	3
*14	29A-509-1	#10 Lock Washer	16
*15	29A-306-15	#10 Flat Washer	1
16	29A-310-5	Carriage Bolt #10-24 x 3/4 lg.	1
17	29L-646	Unitized Fence	1
18	29L-650	Guard	1
19	29L-647	Guard (Retractable)	1
20	29L-649	Jointing Fence	1

Key No.	Part No.	Description	Quan.
21	29L-648	Push Block	1
22	29L-651	Clamp Rod	1
23	29L-652	Clamp Plate	1
*24	F-29A-246-12	Hex Hd. Bolt 1/4-20 x 1" lg.	1
25	29L-654	Spring	1
*26	F-29A-252-8	Wing Nut 5/16-18	1
*27	F-29A-306-27	5/16 Flat Washer	1
*28	29A-264-7	Pan Hd. Mach. Screw #10-32 x 5/8 lg.	16
*29	F-29A-327-3	1/4" Lock Washer (Helical)	1
*30	F-29A-306-26	#8 Flat Washer 3/16 I.D. x 1/2 O.D.	1
*31	F-29A-653	#8-10 x 9/16 Lg. Pan Hd. Plasform Screw	1
32	29L-660	1/4-20 Knob (large)	2
33	29L-659	1/4-20 Knob (small)	1
34	45A-289	Label (Self Adhesive)	1
35	45A-290	Label (Self Adhesive)	2
36	45A-297	Label (Self Adhesive)	1
37	29L-655	Vacuum Hose Reducer	1
38	F29A-242-8	Hex Nut 1/4-28	1
39	45A-292	Label (Self Adhesive)	1

*Hardware item — may be purchased locally.

WARNING: FAILURE TO HEED ALL ASSEMBLY, SAFETY, AND OPERATING INSTRUCTIONS AND WARNINGS REGARDING THE USE OF THIS PRODUCT, ALONG WITH THOSE OPERATING INSTRUCTIONS AND WARNINGS IN THE ROUTER AND THE ROUTER TABLE OWNER'S MANUALS, CAN RESULT IN SERIOUS BODILY INJURY.

SEARS / CRAFTSMAN

ROUTER TABLE EXTENSIONS NO. 25211

GENERAL: The Router Table Extensions are used with the 25443, 25444, 25475 and 25479, Router Table. The extensions increase the length of the router table resulting in a larger work surface, allowing convenient additional support when routing long workpieces.

The extensions CANNOT be used with the 25457 and 25473, Router Tables.

Eight screws, nuts, and lockwashers are packaged with this product which are necessary when assembling the extensions to the 25475, Router Table.

They are NOT used with the 25443, 25444, and 25479 Router Tables because those Router Tables come with a sufficient quantity of fasteners to permit the assembly of the extensions to those Router Tables while the 25475 does not.

NOTE: If your Router Table has not been assembled yet, proceed to the following section, ASSEMBLING THE EXTENSIONS TO THE ROUTER TABLE. If your Router Table has already been assembled and used proceed as follows:

a. DISCONNECT THE POWER CORD TO THE ROUTER FROM THE ELECTRICAL OUTLET.

b. Remove any router bit that is now in the router.

c. Lower the router so the router bit chucking nut is below the top surface of the table.

d. Remove all accessories, such as guards, miter gauge, and fences from table.

e. Place the table, top side down, on a flat surface and disassemble the four legs from the table by removing the screws, nuts, and washers that hold the legs in place.

f. Proceed to the following section.

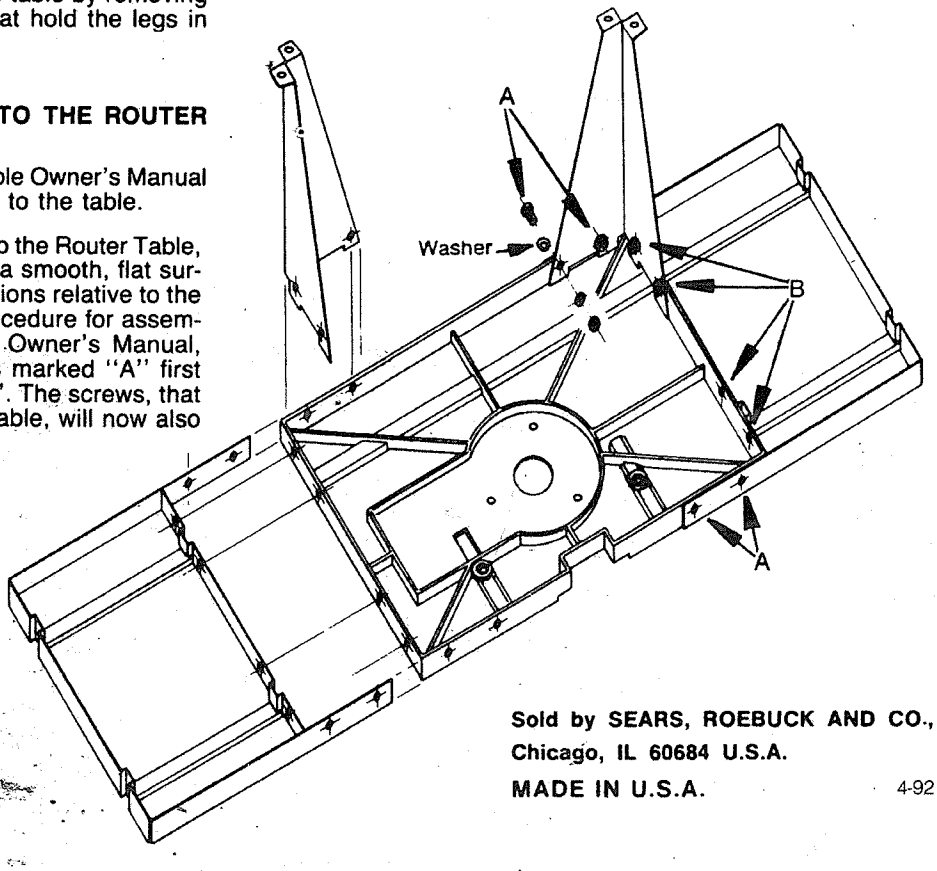
ASSEMBLING THE EXTENSIONS TO THE ROUTER TABLE.

Refer to the section in your Router Table Owner's Manual concerning the assembly of the legs to the table.

1. To assemble the Table Extensions to the Router Table, place the table, top side down, on a smooth, flat surface, and position the Table Extensions relative to the table as shown. Now follow the procedure for assembling the legs to the table in the Owner's Manual, making sure to tighten the screws marked "A" first followed by the screws marked "B". The screws, that normally just hold the legs to the table, will now also hold the extensions on the table.
2. MAKE SURE ALL SCREWS AND NUTS ARE SECURELY TIGHTENED
3. Turn the table top side up and check to see that the extensions are even with or slightly below the table top.

   IN NO CASE SHOULD THE EXTENSIONS BE HIGHER THAN THE TOP OF THE TABLE OR ELSE THEY MAY INTERFERE WITH THE WORKPIECES DURING ROUTING CAUSING A CONDITION THAT CAN RESULT IN POSSIBLE SERIOUS INJURY.
4. If the extensions are higher than the top of the table, loosen the screws holding the extensions and reposition them so they are even with or slightly lower than the top of the table. SECURELY TIGHTEN ALL SCREWS AND NUTS ONCE AGAIN.
5. To double check, slide a flat piece of wood along the top of the table in both directions. Make sure that the end of the wood moves freely without contacting the edge of the extension next to the table.
6. Continue with assembly of the Router Table as described in the Owner's Manual or reassemble the accessories and guards previously removed.

WARNING: DO NOT PLACE HEAVY OBJECTS OR PRESS HEAVILY ON THE EXTENSIONS OR ELSE THEY MAY BE DAMAGED CAUSING A CONDITION THAT CAN RESULT IN POSSIBLE SERIOUS BODILY INJURY DURING ROUTING.



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